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2030 Agenda for Sustainable Development**

Background document

Available in English only

**Principles of SDG Indicator Reporting and Dissemination Platforms and guidelines for their  
application**

Prepared by United Nations Statistics Division / Department of Economic and  
Social Affairs



## **Principles of SDG Indicator Reporting and Dissemination Platforms and guidelines for their application**

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1. The global SDG indicator framework developed by the Inter-agency and Expert Group on SDG indicators, and adopted by the General Assembly in 2017 in its resolution on Work of the Statistical Commission pertaining to the 2030 Agenda for Sustainable Development (A/RES/71/313), is the basis for reviewing the implementation of the 2030 Agenda for Sustainable Development. In the same resolution, the General Assembly urges the United Nations Statistical Commission to ensure the harmonization and consistency of data and statistics for the indicators used to follow up and review the Sustainable Development Goals and targets.
2. The High-Level Group for Partnership, Coordination and Capacity-building for Statistics (HLG-PCCB) has been tasked by the Statistical Commission to promote system-wide coherence and coordination for data and statistics in support of the 2030 Agenda for Sustainable Development, as the implementation of the SDG indicator framework requires national statistical systems to store, analyze, share and disseminate a large volume of complex SDG-related data and indicators, disaggregated by characteristics such as age, sex, residence, income, and disability at the national and sub-national levels.
3. The main framework for responding to the data needs of the 2030 Agenda is provided by the Cape Town Global Action Plan for Sustainable Development Data, adopted by the UN Statistical Commission at its 48th session and endorsed by the UN General Assembly in its resolution A/RES/71/313. Strategic Area 4 of the Cape Town Global Action Plan on “Dissemination and use of sustainable development data” and its Objective 4.1 call to “develop and promote innovative strategies to ensure proper dissemination and use of data for sustainable development”.
4. Based on the achievements and lessons learned from monitoring the Millennium Development Goals (MDGs), national statistical offices have stressed the need for national SDG indicator reporting and dissemination platforms to improve access to data on key national development priorities and the transparency of official statistics, in compliance with the Fundamental Principles of Official Statistics.
5. The principles and guidelines for the design and implementation of national data platforms contained in this document were initially discussed and proposed at the meeting on National Reporting Platforms, held from 22 to 24 January 2018 in New York. They were submitted to the 49th session of the Statistical Commission for information and review. Based on the experiences in countries, and further consultations, the principles and guidelines were updated and finalized as reflected in this document.

## Definition

6. A National Reporting and Dissemination Platform can be understood as a means to report and disseminate national statistics including SDG indicators and descriptive metadata, and refers to a web site, database(s), and associated IT infrastructure, workflows and processes used to collect, store, secure, and ultimately disseminate data and related metadata and documentation in an easily accessible way to reach all target users. Target users may encompass government officials and policy makers, members of academia, non-governmental organizations and non-profits, international organizations, media and other information providers, business community, as well as individual users.<sup>1</sup> Given that the scope of the platform is wider than reporting and dissemination for the SDGs, the platforms can be also referred to as “national data platform”. Such a platform may be standalone or be the hub in a network of platforms, run by various agencies of the national statistical system and linked through standardized interfaces, thus facilitating efficient data exchange at both the national and international level.

## Principles

7. The below principles are intended to be universally applicable and Member States may consider them when establishing their National Reporting and Dissemination Platform to foster interoperability of solutions and data.

### 1. Clear institutional arrangements and management

The responsibility for the development, implementation and maintenance of a National Reporting and Dissemination Platform, including the required coordination and cooperation within the national statistical system, as well as accountability and oversight, should be clearly established through adequate laws and/or regulations, mandates and standard operating procedures. The National Statistical Office, commonly tasked with the coordination of the national statistical system, is typically assigned this responsibility. Information flows and the role of each actor within the national statistical system should be clearly established.

### 2. Fitness for purpose

The exact purpose, scope and features of the National Reporting and Dissemination Platform should be clearly established in cooperation and consultation with all stakeholders and user groups. National Reporting and

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<sup>1</sup> See National Reporting Platforms (Practical Guide), prepared by the UNECE Task Force on Reporting SDG Indicators Using National Reporting Platforms, 17 January 2018. To conform with the Fundamental Principles for Official Statistics, a national reporting platform would ideally have the following minimal features: (a) gather official statistics calculated according to established and reliable methodology; (b) provide national and global metadata in a transparent manner; (c) be publicly accessible; (d) allow for feedback from data users.

Dissemination Platforms should comply with the Fundamental Principles of Official Statistics and should address the priority needs and requirements of subnational, national, regional and global monitoring and reporting, as well as reduce the reporting burden.<sup>2</sup>

### 3. Sustainability

The decision on the purpose, scope, features, development and implementation of the National Reporting and Dissemination Platform needs to take into account the availability of internal and external resources and capacities over the medium and long term. Government offices and partner organizations need to consider the specific objectives of the country in establishing its National Reporting and Dissemination Platform, the sustainability of the platform, and the duration of support by the partners.

### 4. Interoperability and statistical standards

The components of National Reporting and Dissemination Platforms should follow international and national statistical standards and best practices, to facilitate the integration, customization and further development of components and different solutions. In particular, standards should be supported that aim to facilitate data harmonization and exchange across different stages of the statistical production and across institutions including common data structure definitions and code lists, and the integration of data flows and processes within the national statistical system.

## **Guidelines for the implementation of an SDG Indicator Monitoring and Reporting Platform**

8. The following guidelines are directed in particular at countries that aim to develop their National Reporting and Dissemination Platform jointly with development partners and solution providers but may be equally applicable to any country.

1. National Ownership. National statistical offices should have the ability to maintain, adapt, transform and customize their National Reporting and Dissemination Platform to address their own and their users' needs, such as the management of subnational administrative boundaries, country-specific ethnic and language groups, and additional indicator definitions related to national development priorities. For performance and scalability purposes it is often advantageous to host the platform in the cloud,

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<sup>2</sup> An important consideration in this context is the national reporting mechanism. See National Mechanisms for providing data on global SDG indicators, prepared by the UNECE Task Force on Reporting SDG Indicators Using National Reporting Platforms, 17 January 2018.

however it should be ensured that the management of the system remain with national authorities irrespective of physical placement of the system. Reference principles: [1](#), [2](#), [3](#).

2. Collaboration. National Reporting and Dissemination Platforms should be designed, developed, improved and maintained on the basis of a collaborative approach that leverages learning between various stakeholders of the national statistical system as well as technology developers, donors, policy makers, subject-matter experts, business partners, advocacy groups and both institutional and grassroots users. Reference principles: [1](#), [2](#), [3](#).
3. Multilingualism and accessibility. In order to leave no-one behind, to ensure national ownership, and to promote the use and impact of data for policy and decision making at the local level, National Reporting and Dissemination Platforms should support national languages and implement national and international best practices in terms of accessibility to persons with disabilities, as well as full access across the range of browsers and devices, including mobile devices. Reference principles: [2](#).
4. User-centered Design. National Reporting and Dissemination Platforms should be designed for and with users (including both operational and end users, such as data consumers or NSO officers), and project owners should engage them in all phases of development. This includes, inter alia, the analysis of user-platform interaction and the establishment of a permanent feedback loop that will result in an iterative process of continuous improvement in response to user demand. Regular collection and analysis of usage data and online user feedback should further assist in providing guidance to future modifications and enhancements. To facilitate the central role of the user, data platforms should be developed following the Agile principles and using strategies such as design thinking. Reference principles: [2](#), [3](#).
5. Data Communication. National Reporting and Dissemination Platforms should implement innovative strategies to improve the presentation, communication and use of data for sustainable development. They should support multiple ways to explore, represent and communicate data on statistical indicators, and address the needs and priorities of diverse groups of users, including policy-makers, legislators, civil society, private sector, the media, the public, and academia. This includes innovative data visualization and data story-telling capabilities. Reference principles: [1](#), [2](#), [3](#).
6. Data disaggregation. National Reporting and Dissemination Platforms should support improved access to, and use of, disaggregated data to focus on all segments of the population, including the most vulnerable. In

particular, data platforms should allow the management and dissemination of data disaggregated by subnational geographic areas, sex, age group, residence, wealth and income group, disability, ethnicity, migrant status, and other important characteristics relevant to national context.

Reference principles: [2](#).

7. Modularity and extensibility. National Reporting and Dissemination Platforms should be modular, composed of modules (sub-systems) and components that interoperate to service the different phases of the data life cycle. The data that these modules and components consume as inputs and produce as outputs, should as much as possible be based on open standards and protocols such as Statistical Data and Metadata Exchange (SDMX) and Common Statistical Production Architecture (CSPA). The system should support extensibility through addition of modules or components, upstream or downstream.

Reference principles: [2](#), [3](#), [4](#).

8. Standardized interfaces. National Reporting and Dissemination Platforms should provide standardized Application Programming Interfaces (APIs) in accordance with the industry best practices such as the OpenAPI Specification. This facilitates creating and sharing data across global, regional, national and sub-national data communities.

Reference principles: [3](#), [4](#).

9. Scalability. A National Reporting and Dissemination Platform should have an architecture that enables a statistical office to start with a limited scale implementation and iteratively progress towards a full-scale system. Tasks such as adding indicators or breakdowns, should be performed directly by operational user at the statistical office, and should not require additional software development. By taking into account the needs and resources of different NSO departments and other national agencies, the design of data platforms should facilitate their adoption across the national statistical system.

Reference principles: [2](#), [3](#).

10. Metadata. National Reporting and Dissemination Platforms should support statistical metadata at the appropriate level of granularity. This includes structural metadata such as codes and their descriptions; reference metadata such as methodology and quality aspects of published indicators; and other relevant information such as the date of last update.

Reference principles: [2](#).

11. Open Data. National Reporting and Dissemination Platforms should be consistent with Open Data best practices, summarized as “Open data and content can be freely used, modified, and shared by anyone for any

purpose<sup>3</sup>”. National Reporting and Dissemination Platforms should include and follow a data license consistent with the Open Data principles, such as Creative Commons Attribution (4.0) or the Open Database License. Published datasets should be clearly attributed to the originating organization.

Reference principles: [2](#), [3](#).

12. Linked Data. Responding to the increasing demand for open data to leverage global and national investments in data for evidence-based policy and decision making, National Reporting and Dissemination Platforms should comply with a minimum of level 3 of the 5-star Linked Open Data principles<sup>4</sup>:

1. Make data available on the web (in any format), under an open license
2. Make data available as structured data (e.g., Excel instead of image scan of a table)
3. Make data available in a non-proprietary open format (e.g., CSV instead of Excel)
4. Use URIs to denote data items, so they can be referenced.
5. Link own data to other data on the Web, to provide context

Reference principles: [2](#), [3](#).

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<sup>3</sup> <http://opendefinition.org>

<sup>4</sup> The 5-star rating system for Open Linked Data were proposed by Tim Berners-Lee in 2006, and updated in 2010.